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(71) Applicant (for all designated States except US): **KOREA INSTITUTE OF INDUSTRIAL TECHNOLOGY** [KR/KR]; 35-3, Hongchun-Ri, Ipjang-Myun, Chunan-City, Choongchungnam-Do 330-825 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHO, Young Jun** [KR/KR]; 110-1303 Samsungmyungga-town Yeonwon-Village, Bojeung-Ri Goosung-Myun, Yongin-City, Gyeonggi-Do 449-913 (KR). **BYUN, Chul Soo** [KR/KR]; 2-709 Seorin-Apt., Dogok 1-Dong, Kangnam-Gu, Seoul 135-857 (KR). **PARK, Moon Soo** [KR/KR]; 201-805 Hyundae- Apt., Dohyun-Village Shingal-Ri, Giheung-Eub, Yongin-City, Gyeonggi-Do 449-907 (KR). **KANG, Kyung Tae** [KR/KR]; 110-105 Banpojung-Apt., Banpobon-Dong, Seocho-Gu, Seoul 137-049 (KR). **CHOI, Young Seok** [KR/KR]; 1013-203, Gocheungjugong-Apt., 30 Haan-Dong, Kwangmyung-City, Gyeonggi-Do 423-060 (KR). **CHUNG, Il Yong** [KR/KR];

(74) Agent: **LEE, Jae Kab**; 4th Floor, Kyoung Sung Bldg., 641 Yeoksam-dong, Gangnam-gu, Seoul 135-080 (KR).

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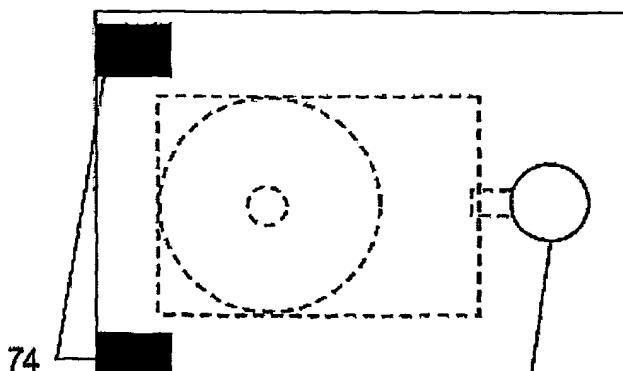
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(54) Title: PIEZOELECTRIC INK JET PRINTER HEAD AND ITS MANUFACTURING PROCESS



(57) Abstract: Disclosed is a piezoelectric ink jet printer head in which a chamber and an ink storage are integrally formed. A process for manufacturing the ink jet printer head is also disclosed. The ink jet printer head formed by laminating a plurality of plates includes: a) an actuator portion being composed of upper and lower electrodes, a piezoelectric plate inserted between the upper and lower electrodes, a protection layer placed on the upper electrode, and a resilient plate disposed beneath the lower electrode; b) an ink passage portion composed of a spacer disposed beneath the resilient plate and forming a side portion of a chamber, a channel plate disposed beneath the spacer, the channel plate forming an ink passage in one side of the chamber and simultaneously expanding the chamber, and a nozzle plate disposed beneath the channel plate, the nozzle plate forming the lower side of the chamber and having a nozzle communicating with the chamber; and c) an ink-supplying portion formed by a through-hole reaching the ink passage of the channel plate through the actuator portion and the spacer.

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communicating with the chamber; and c) an ink-supplying portion formed by a through-hole reaching the ink passage of the channel plate through the actuator portion and the spacer.